

at any time be tempted to take up this subject fear the dullness of mere routine. That is only one side of the picture; to anyone who follows progress in the laboratories of the world and tries in whatever way to contribute to it, life can be very exciting indeed.

L. P. GARROD.

THE CHAIR OF PHYSIOLOGY AT CAMBRIDGE

MICHAEL Foster, Langley, Barcroft—and now Adrian: a succession as notable as that of the Cavendish Professorship. Had Sherrington—with whom he shared the Nobel Prize a few years ago—been twenty-five years younger, as he was when he went to Oxford, Adrian might have evaded the natural consequence of his reputation, and remained a Research Professor of the Royal Society. Fortunately for Cambridge he has in fact been willing to accept the harder, and so the more honourable, task.

A mountaineer and fencer, an experimenter with the same skill and subtlety as those two arts require, an admirable Chairman of Committee—not least because of his anxiety to get the business over—Editor since Langley died of the *Journal of Physiology*, Member of the Medical Research Council and Chairman of one of its Committees on Mental Disease, an Honorary Doctor of Harvard and Oxford, an investigator whose discoveries have permanently enriched our knowledge of the nervous system, Adrian's chief pride is to think of himself as a disciple of the young Cambridge physiologist and engineer, Keith Lucas (who died flying in 1917). Colleagues in several continents are proud to count themselves disciples of Adrian. So the flame is handed on.

From Westminster, Adrian became a scholar of Trinity, and taking the Natural Sciences Tripos, was not content to get a first class in one subject and a certain aggregate on the whole; he proceeded to get—it is alleged—a first class in five separate subjects: Goodness knows what they can have been! The least marks he made were the highest in the subject.

Joining Lucas in his studies of nerve, Adrian soon became a Fellow of Trinity and then, a year or two after, the War came. By some kind of magic, comparable only with that of his Tripos, he rapidly emerged from Bart's with medical qualifications, and proceeded to work on military patients with nervous injuries or disorders. Electrical stimuli, however, were not quite forgotten, for their judicious (and painful) application seems, from his own dry account of the matter, to have

produced memorable recoveries from certain determined inhibitions. Returning to Cambridge after the War he inherited Keith Lucas' laboratory and apparatus and started where he—and Lucas—had left off.

Sherrington's work had made it certain that ordered muscular movement is based upon a continual balance between motor impulses on the one hand, proprioceptive impulses on the other: a quantitative balance, not merely an interplay. But how could the motor, or the sensory, effect be measured? Merely by the number of nerve fibres involved? To have given a new quantitative basis to nervous behaviour, to have shown that afferent or efferent effect in any given neurone depends on the pattern in time of the impulses which travel in it, is the great achievement of Adrian's recent work. In it he and his pupils have explored the activity of the single neurone, the single sensory end-organ, the single muscle group, their excitation, their adaptation, their fatigue. In the last few years, however, as though that were not difficult enough, Adrian has been exploring the electrical phenomena occurring in the brain and—with a reasonable latent period which one hopes his new duties will not extend—some new wonder will doubtless emerge.

Adrian would be an admirable conjurer but for the fact that his genuine magic is as good as any fake. Cambridge classes may hope to have some of the treats he has given to the Physiological Society: the rhythmic waves of his own brain, shown on a screen or written in ink on a strip of paper, disturbed or abolished by mental arithmetic: the action potentials of a single fibre-group in a colleague's biceps, demonstrated with a needle and loud speaker to show how the strength of muscular contraction is graded: the ear of a (more or less) dead cat used as a microphone. Adrian's dry wit and his friendly elusiveness have endeared him to his colleagues and to the Physiological Society, and while his predecessor stands high in the affections of Cambridge students, Adrian's friends know that, with a different technique, he will soon reach a similar position.

A. V. H.

ANIMAL CRACKERS.

I often think
If tigers were pink,
And lions a nice shade of blue,
We'd be well on the way
To achieving some day
A really enjoyable zoo.

WOT.

